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COMMENTS ON "KEY CATEGORY" AND  
"RELATIVE COST" CRITERIA

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INTRODUCTION

Pursuant to a directive from the EDAC Executive Committee, the Chairman of EDAC Working Group I established on 7 October 1955 a subgroup to prepare a briefing on approaches for reformulating criteria for a possible revision of COCOM controls. (EDAC WG I, M-42, 12 October 1955). This briefing was to be part of the preparation for the next CG meeting.

The CIA representative on the subgroup was requested to prepare brief statements on the "Relative Cost" criterion and the "Key Category" approach as part of this exercise. This paper does not purport to do more than identify salient aspects of the two subjects and does not take the place of any of the more detailed presentations in various specific reports.

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I. "KEY CATEGORY" CRITERION

"Key Categories" are generic groupings of commodities which can be ranked according to their relative strategic significance for the build-up of a given military and supporting industrial complex.

Since the identification of any particular key category proceeds chiefly on the determination of end use, the specific materials covered by that category can reflect any practicable substitutability or transferability that may have to be recognized in order to achieve meaningful coverage. As in any strategic controls program, the aggravation of identifiable bottlenecks is particularly significant where controls are supposed to restrict the accessibility of, and use of, substitute material for scarce resources. Well known bottlenecks in the Bloc are certain types of metal working machinery such as presses, some specialized chemicals of a high purity, industrial diamonds, and a few metals (i.e., cobalt, copper, and nickel) which are either nonexistent or in short supply. Even where the Bloc has substitutable resources, they may be limited and embargo of such substitutes may thus become of considerable importance.

This technique is compatible with any strategic criteria including those now in effect. It can be applied separately to the Eastern and Western Communist areas or to the whole Sino-Soviet Bloc. In short, it presupposes the definition of trade-control objectives. It is a tool for identifying goods, technology and services which should be controlled if pre-defined trade-control objectives are to be pursued with maximum effect.

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The key category criterion lends itself to a phasing operation and such categories could be arranged according to the immediacy with which they bear on the mounting of a war effort or any other given objective. For example, in an effort to prevent the launching of an offensive attack, communications and transportation equipment could be considered as key categories of items that should be denied the Bloc. <sup>1/</sup> In the communications field, landlines, telegraph, telephone equipment, wire and cable, radio transmitting and receiving apparatus, and radar equipment are examples of listings for this key category. Of equal importance would be the category of transport equipment such as rolling stock, fast merchant vessels, tankers, large ice breakers, four wheel drive trucks, etc. Carrying this approach a bit farther, it might be considered desirable to embargo all essential items in the electronics and precision instrument field, or in the machine tool category. Certain less advanced types of machine tools or communication equipment might be excluded from an embargo against the European Soviet Bloc but included in an embargo against Communist China as such equipment would be most useful and consequently strategic at the present stage of her economic development. In the same vein, certain categories might be of greater key significance to China than to the rest of the Bloc. For example, construction equipment would be a very vulnerable sector of the Chinese economy for war making purposes. In this category, construction equipment such as roadbuilders,

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<sup>1/</sup> Such key categories as atomic energy materials and munitions are self-evident and need no further elucidation.

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earthmovers, welders, pumps, diesel engines, electric motors, and everything that would be used to construct roads, railroads, landing fields, rocket launching sites and buildings could be listed as well as the equipment to make them. In fact any key industrial sector of the economy could be dealt with in the same fashion.

Another variation of this approach would be to draw up a list of items with the intention of depriving the Bloc of Western know-how. Thus the fruits of Western scientific and technological progress in all forms would be denied, particularly in the electronics, chemical, metallurgical and related fields. Any equipment incorporating newest developments would be listed in addition to prototypes and blueprints.

If it is considered desirable to maintain a quantitative control list, in addition to an embargo list of "immediately useful categories," a secondary priority of "categories contributing to a military build-up" could be subject to quotas, and perhaps all remaining items in Western export trade to the Bloc placed under surveillance thus eliminating the present IL/III and making possible comprehensive trade reporting and discernment of novel strategic developments.

The key category approach is quite flexible and can be adapted efficaciously to an extensive or limited list of controlled items. As less specificity is needed than in the present lists, cut-off points could be abolished and more discretion given to the exporting country in borderline cases. The key

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category approach, however, places a premium on the accuracy of intelligence in making choices for policy determination. Its very simplicity could be its greatest shortcoming in the event of wrong selection of categories.

The probable acceptability of the Key Category technique to other CG countries is considered to lie beyond the scope of this paper.

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## II. "RELATIVE COST" CRITERION

The "relative cost" approach to criteria for strategic trade controls seeks to maximize the impact of the denial of a given commodity to an economy in terms of "economic cost". Meaningful denial, under this approach, could be effected only for commodities the domestic production of which would involve significant economic cost to the Bloc. The "relative cost" approach to criteria rejects the distinction between "strategic" and "non-strategic" trade as the determining factor for trade controls against the Soviet Bloc as being, by itself, inadequate, since any trade with the Bloc is, on balance, advantageous to the Bloc's strategic position, and denial of any particular commodity should be evaluated in terms of its "cost" to the Bloc's economy. While economic cost to the Soviet Bloc would thus be maximized by total embargo, such a policy is not contemplated at this time for political reasons.

The "relative cost" concept is based on the assumption that the only long-run economic burden of western trade controls lies in the limitation they impose on the productivity of Bloc resources by forcing the Bloc to use larger amounts of land, labor and capital to replace imports, thus increasing real costs.

Calculation of the aggregate cost to the Bloc from a loss of trade requires a computation of the difference between the total cost of producing domestically and the total cost of importing the particular quantities of each commodity which the Bloc is or would be importing without controls. The difference between domestic and import unit costs would be multiplied by quantities imported to produce a list of commodity

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categories ranked according to the different economic burdens, or costs, which an embargo of these commodities would impose on the Bloc.

The imposition of a maximum economic burden, as indicated previously, implies a complete embargo, but if something less than the maximum burden is to be inflicted by trade controls, the application of the relative cost criterion, enables the imposition of a maximum burden per value unit of trade curtailment.

If ruble and dollar prices could be adjusted to represent real costs, a series of ruble-dollar ratios could be constructed which, when considered in conjunction with the amount of international trade in these commodities, would reveal those items or groups of items which it would be most advantageous to the USSR to import and the loss of imports of which would hence inflict maximum cost.

The development and practical use of this technique, however, is greatly hampered by lack of information, particularly about all cost factors and even sales prices in the Bloc. As a result the difficulty of determining meaningful ruble-dollar ratios for even a selected list of commodities is great. As work continues with the "relative cost" concept, more accurate ruble-dollar ratios will emerge. At this stage, however, sufficient data would not be available for an overall COCOM list review.

This concept of maximizing the economic burden is likely to be rejected in COCOM as an all-out "economic warfare" measure.